

Amendments To The Claims:

Please amend the claims as shown.

1 – 16 (canceled)

17. (new) A method for adjusting a waste gas probe measuring signal of a multi-cylinder internal combustion engine, comprising:
pre-defining a crankshaft angle relative to a reference position of a piston in a cylinder of the engine, wherein:
the cylinders are assigned injection valves that deliver fuel to the respective cylinders,
the waste gas probe is arranged in a waste gas tract,
the measuring signal is a characteristic for the air/fuel ratio in the respective cylinder, and
the predefined crankshaft angle is adapted as a function of an instability criterion of the controller;
detecting the measuring signal;
assigning the detected measuring signal to a cylinder of the engine; and
generating a variable by a controller for influencing the air/fuel ratio in the respective cylinder based on the detected measuring signal.

18. (new) The method as claimed in claim 17, wherein additional controllers that generate additional variables are assigned to the remaining cylinders of the multi-cylinder engine.

19. (new) The method as claimed in claim 17, wherein the instability criterion depends on the generated variable of the controller.

20. (new) The method as claimed in claim 19, wherein the instability criterion is fulfilled if the variable is equal to either the maximum or minimum value to which the variable is limited by the controller.

21. (new) The method as claimed in claim 19, wherein the instability criterion is fulfilled if all generated variables are equal to either a maximum or a minimum value limited by the controller of the respective cylinder for a predefined time period.

22. (new) The method as claimed in claim 21, wherein the instability criterion is fulfilled:

for an even number of cylinders, one half of the generated variables is equal to the maximum value limited by the respective controller and the other half of the generated variables is equal to the minimum value limited by the respective controller, and

for an odd number of cylinders, a first number of generated variables is equal to the maximum value limited by the respective controller and a second number of generated variables is equal to the minimum value limited by the respective controller wherein the first number differs by one from the second number and the sum of the first and the second number are equal to the odd number of cylinders.

23. (new) The method as claimed in claim 22, wherein an error of the injection valve or an actuating element that exclusively influences an air feed to the respective cylinder is detected if:

the generated variable of the respective cylinder is equal to either the maximum or minimum value limited by the controller for a predefined time period, and

at least one generated variable is assigned to another cylinder is not equal to either the maximum or minimum value limited by the controller.

24. (new) The method as claimed in claim 23, wherein the instability criterion is fulfilled if at least the generated variable assigned to a cylinder oscillates at an amplitude greater than a predefined amplitude threshold.

25. (new) The method as claimed in claim 17, wherein the controller comprises a monitor that determines a status variable that depends on the detected waste gas probe measuring signal and is coupled to the instability criterion that depends at least one of the status variables.

26. (new) The method as claimed in claim 25, wherein the instability criterion is fulfilled if all status variables are equal to either the maximum or minimum value limited by the controller of the respective cylinder of the multi-cylinder engine for a predefined time period.

27. (new) The method as claimed in claim 25, wherein to fulfill the instability criterion it is required that all status variables of all cylinders of the multi-cylinder engine are equal to their maximum or minimum values limited by the controller for the predefined time period.

28. (new) The method as claimed in claim 27, wherein to fulfill the instability criterion, it is required that:

with an even number of cylinders, one half of the total number of status variables are equal to a maximum value limited by the controller and the other half are equal to the minimum value limited by the controller, and

with an odd number of cylinders, a first number of status variables are equal to the maximum value limited by the controller and a second number of status variables are equal to the minimum value limited by the controller where the first number differs from the second number by one and the sum of the first and the second numbers is equal to the odd number of cylinders.

29. (new) The method as claimed in claim 28, wherein an error of the injection valve or an actuating element that exclusively influences an air feed to the respective cylinder is detected if:

the status variable of the respected cylinder is equal to either a maximum or a minimum value limited by the controller for a predefined period, and

at least one generated variable is assigned to another cylinder is not equal to either the maximum or minimum value limited by the controller.

30. (new) The method as claimed in claim 29, wherein the instability criterion is fulfilled if at least the status variable assigned to one cylinder oscillates at an amplitude greater than a predefined amplitude threshold.

31. (new) The method as claimed in claim 30, wherein the predefined crankshaft angle corresponds to a predefined fraction of the expected stability range.

32. (new) The method as claimed in claim 14, wherein the fraction corresponds to 1/5 of the expected stability range.

33. (new) The method as claimed in claim 32, wherein the measuring signal of the waste gas probe is characteristic for the air/fuel ratio in the respective cylinder of a first part of cylinders of the engine and a second waste gas probe having a second measuring signal is characteristic for the air/fuel ratio in a second group of cylinders of the engine and the detection of the measuring signal of the waste gas probe and the second waste gas probe are adjusted separately and related to the first and second part of cylinders of the engine.